CLAIMS

1. A valve device for controlling fluid flow, comprising

a hollow body bounding a flow path for the fluid through said valve device,

a valve obturating member in said flow path and movable between a more obturating position and a less obturating position for permitting lesser and greater flows of said fluid along said path, which flows urge said member in the sense from said more obturating position to said less obturating position, said valve obturating member including magnetic portions,

an electrically energizable inductor which, while remaining stationary relative to said body and while electrically energized, acts upon said valve obturating member to urge said valve obturating member in the sense from said less obturating position to said more obturating position,

an electrical supply arrangement connected to said inductor, and

a control arrangement which is connected to said electrical supply arrangement and which serves to control the current supplied to said inductor by said supply arrangement.

2. A valve device according to claim 1 and having no moving parts other than said valve obturating member.

3. A valve device according to claim 1 or 2, and further comprising a valve seat on said flow-path, said more obturating position being an end position in which said valve obturating member is fully closed on the valve seat, so as to be applied to the seat in a substantially fluid-tight manner, and said valve seat facing downstream of said flow path, whereby said less obturating position is further downstream in said flow path than is said more obturating position.

4. A valve device according to any preceding claim, wherein there are a plurality of electrically energizable inductors, including said inductor, which, while remaining stationary relative to said body and while electrically energized, act to urge said valve obturating member in said sense, and which are connected to said electrical supply arrangement, said control arrangement serving to control the currents supplied to the respective inductors by said supply arrangements, and said inductors constituting a linear motor.

5. A valve device according to claim 4 and further comprising a linear encoder which is connected to said control arrangement and whereby the position of said valve obturating member along said flow path is determinable.

6. In a filler of a machine the output of which is filled containers, a valve device according to any preceding claim.

7. A method of controlling fluid flow, comprising producing fluid flow along a flow path in a direction such that said fluid flow urges a valve obturating member in a sense from a more obturating position to a less obturating position, and electrically energizing an inductor, while said inductor remains stationary, to cause said inductor to act inductively upon said valve obturating member to urge said valve obturating member in the sense from said less obturating position to said more obturating position.

8. A method according to claim 7, and further comprising varying the electrical current supplied to said inductor.

9. A method according to claim 7 or 8, wherein said more obturating position is an end position in which said valve obturating member prevents flow of said fluid past said valve obturating member, less obturating position

being further downstream in said flow path than is said more obturating position.

10. A method according to any one of claims 7 to 9, and including electrically energizing a plurality of inductors, including said inductor, while said inductors remain stationary, to cause said inductors to act upon said valve obturating member to urge said valve obturating member in the sense from said less obturating position to said more obturating position.

11. A method according to claim 10, and further comprising determining the position of said valve obturating member along said flow path and controlling current supply to the individual inductors accordingly.

12. A method according to any one of claims 7 to 11, and further comprising filling with the fluid a container downstream of said valve obturating member.